

## 4. THIRD CONTRIBUTION TO OUR KNOWLEDGE OF BATRACHIANS FROM AUSTRALIA. BY DR. A. GÜNTHER.

(Plate VII.)

The following is a continuation of two other papers treating on the same subject; they were published in the 'Annals and Magazine of Natural History,' 1863, p. 26, and in the 'Proceedings' of this Society, 1863, p. 249.

## MIXOPHYES (g. n. RANIDARUM).

Habitus as in *Rana*, the head being broad and large; legs of moderate length. Tongue circular, not notched behind; vomerine teeth in two series; lower jaw without tooth-like apophyses. Openings of the Eustachian tubes narrower than the choanæ; tympanum distinct. Fingers free, none opposite to the others; interdigital membrane between the toes well developed; fifth toe moveable to its base; a long, compressed, subsemicircular tubercle at the metatarsus. Male with a single subgular sac, which is not visible externally.

## MIXOPHYES FASCIOLATUS. (Pl. VII. fig. 1.)

This Batrachian approaches the true Frogs more closely than any other known from the Australian region; its habitus is that of *Rana*, but the head is disproportionally large and broad. The snout is obtusely rounded, with the canthus rostralis gradually descending in a gentle curve, and with the loreal region obliquely flattened. The nostril is scarcely below the canthus, midway between the eye and the end of the snout. The eye is large, prominent. Cleft of the mouth very wide, much broader than long. The vomerine teeth are in a nearly straight line, between the anterior angles of the choanæ; the two series being separated in the middle by a narrow space. Two long slits on the side of the tongue lead into the subgular sac. The tympanum is nearly as large as the eye. With the exception of a very slight fold above the tympanum, the skin is perfectly smooth.

Fingers tapering, rather slender. The length of the body equals the distance between vent and heel, but it is much more than the length of the remaining foot. Toes two-thirds webbed, so that the three outer phalanges of the fourth toe remain free.

Upper parts brownish olive, with a darker cross band between the hinder half of the superciliaries. A black band runs along the canthus rostralis, widening on the foremost part of the snout below the nostril, and is continued behind the eye, above the tympanum; sides of the body with round brown or black spots; legs with numerous black cross bands, which are most distinct on the hinder side of the fore legs and on the anterior side of the hind limbs. Lower parts uniform white; throat of the male brownish.

Specimens of this Frog have been sent by Mr. Krefft from the

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1 *Mixophyes fasciolatus*. 2 *Pterophrynus affinis*.  
3 *P. tasmaniensis*. 4 *P. lævis*.



Clarence River; the following are the dimensions of an adult female :—

	lines.
Length of the body . . . . .	33
Width of the mouth . . . . .	14
Length of the fore limb . . . . .	23
——— of the third finger . . . . .	7
——— of the hind limb . . . . .	54
——— of the entire foot . . . . .	23
——— of the fourth toe . . . . .	15½

PTEROPHRYNUS AFFINIS. (Pl. VII. fig. 2.)

Habit as in *Camariolius varius*, Peters, but with the snout longer and more pointed; the canthus rostralis is rather distinct between eye and nostril, and is strongly deflexed in front. Upper parts smooth, the lower coarsely granulated. Eye rather large, not much shorter than the snout. Tongue narrow, ovate, entire behind; vomerine teeth none, but there is a short, scarcely perceptible osseous ridge in front of the orbital groove. Toes not fringed; tarsus with a longitudinal fold of the skin; metatarsus with two minute tubercles. The length of the body is more than the distance between vent and metatarsal tubercles. Upper parts reddish olive, with a double series of irregular blackish spots along the back; a black band runs from behind the eye along the side of the body towards the loin, a blackish streak along the canthus rostralis. Lower parts whitish.

	lines.
Length of the body . . . . .	12
——— of the hind limb . . . . .	16
——— of the fourth hind toe . . . . .	5
Distance between vent and knee . . . . .	4½

*Hab.* Western Australia.

Having found in the collection of the British Museum a specimen of *Pterophrynus verrucosus*, Lütken, I convinced myself that the slight swelling of the skin between the angle of the mouth and the shoulder is not produced by an accumulation of glands, so as to deserve the name of a parotoid. The processes of the sacral vertebra are so slightly dilated, that they might be described as cylindrical; however, each process terminates in a cartilage, which is very distinctly dilated. On comparing this Frog with the *Camariolius* of Peters, I came to the conclusion that both these genera must be united; for although Professor Peters describes the processes of the sacral vertebra as narrow, I find them in *Camariolius varius*, Peters, as slightly dilated as in *Pterophrynus*. Probably any one who had no opportunity of observing the following species would have overlooked the dilatation of those processes in the species mentioned. *P. lavis* has them very distinctly dilated, and *P. affinis* and *P. tasmaniensis* are, in this respect, intermediate between these extreme forms. They form only one genus, which, perhaps, must be still further extended; for, whilst none of the species mentioned